



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,173	02/08/2002	Thomas Bayer	BAYER-3 (PCT)	7952

25889 7590 03/28/2003

WILLIAM COLLARD  
COLLARD & ROE, P.C.  
1077 NORTHERN BOULEVARD  
ROSLYN, NY 11576

EXAMINER

PANG, ROGER L

ART UNIT

PAPER NUMBER

3681

DATE MAILED: 03/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/049,173

Applicant(s)

BAYER, THOMAS

Examiner

Roger L Pang

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5-6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### **DETAILED ACTION**

The following action is in response to application 10/049,173 filed on February 8, 2002.

#### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the 4 planet wheels must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: internal gear 12. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### ***Specification***

The disclosure is objected to because of the following informalities: all specific claim references (see page 1, etc.) should be removed from the disclosure.

Appropriate correction is required.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the internal gear (12) of the third stage being rigidly connected with the transmission housing should be inserted into the specification.

Art Unit: 3681

***Claim Objections***

Claim 8 is objected to because of the following informalities: on line 3, a planet wheel mounted "in" a planet carrier should be replaced with --on a planet carrier--. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. On lines 9-11, the internal gears are claimed to be connect with either the transmission housing or the carrier of the third stage. The way this is claim leads one to believe there is a connecting device that can carry out either function, which is not the case. Applicant can not claim 2 different inventions (Fig. 1 and Fig. 2) in the alternative within one claim. It is suggested that applicant choose an embodiment and remove the connection that is not applicable.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ridgely '967.

Ridgely teaches a three stage, speed-reducing planetary transmission having, in each stage, a

Art Unit: 3681

driven sun wheel 11 rolling in an internal gear 15 and interacting with a planet wheel 16 mounted on a planet carrier 21, in which the sun wheels of the second and third stages are each driven by the planet carrier of the preceding stage, and fixed transmission housing 12, in which at least the internal gear of the third stage is rigidly connected with the transmission housing (Fig. 1) and the internal gears of the first and second stages are each rigidly connected with the transmission housing (Fig. 1), and in which, furthermore, the planet carriers of the second and third stages are each provided with four planet wheels across their width (Fig. 2), characterized by the features: the internal gears have a number of teeth in all three stages, and the transmissions have ratios. Ridgely does not specifically teach the number of teeth to be 108 or the ratios of the second stage and third stage being 4 and 5.5, respectively. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ridgely to employ specific number of teeth and specific ratios, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shirokoshi '968. Shirokoshi teaches a three stage, speed-reducing planetary transmission having, in each stage, a driven sun wheel 14,24,45 rolling in an internal gear 11,21,32 and interacting with a planet wheel 13,26, 41 mounted on a planet carrier 12,25,20, in which the sun wheels of the second and third stages are each driven by the planet carrier of the preceding stage, and fixed transmission housing 2, in which at least the internal gear of the third stage is rigidly connected with the transmission housing (Fig. 2) and the internal gears of the first and second stages are each rigidly connected with the planet carrier of the third stage (Fig. 2), and in which, furthermore, the planet

Art Unit: 3681

carriers of the second and third stages are each provided with four planet wheels across their width (Fig. 1), characterized by the features: the internal gears have a number of teeth in all three stages, and the transmissions have ratios. Shirokoshi does not specifically teach the number of teeth to be 108 or the ratios of the second stage and third stage being 4 and 5.5, respectively. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shirokoshi to employ specific number of teeth and specific ratios, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bowman and Lagarde have been cited to show similar 3 stage gear reducers.

### **FACSIMILE TRANSMISSION**

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is (703) 305-3597. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but

Art Unit: 3681

charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (703) 305-3597) on \_\_\_\_\_ (Date)

Typed or printed name of person signing this certificate:

\_\_\_\_\_  
\_\_\_\_\_

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Art Unit: 3681

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roger L Pang whose telephone number is 703-305-0445. The examiner can normally be reached on 5:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 703-308-0830. The fax phone numbers for the organization where this application or proceeding is assigned are 705-305-3597 for regular communications and 705-305-3597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2168.

RLP  
March 20, 2003



Roger Pang